

Figure 1

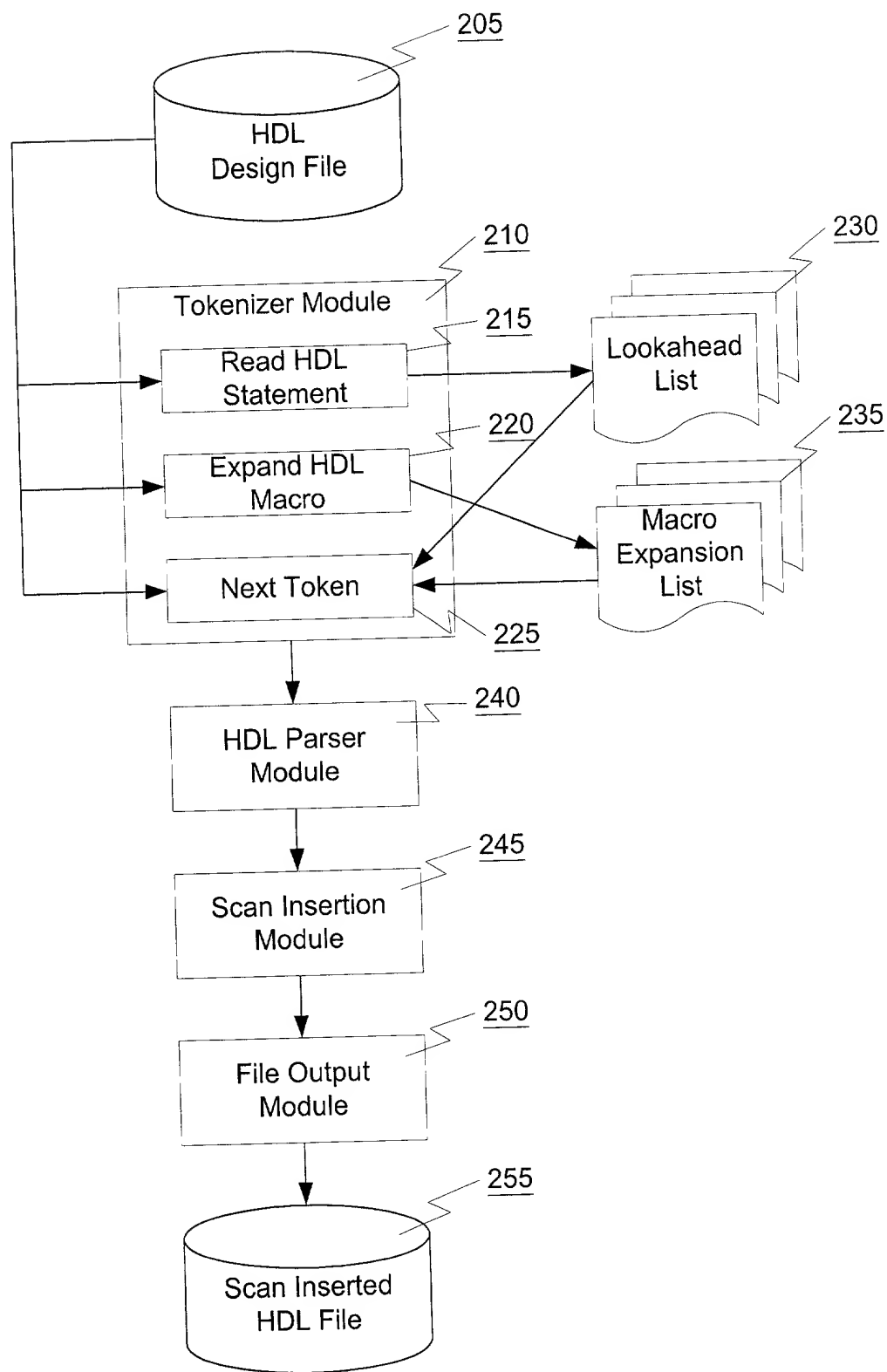


Figure 2

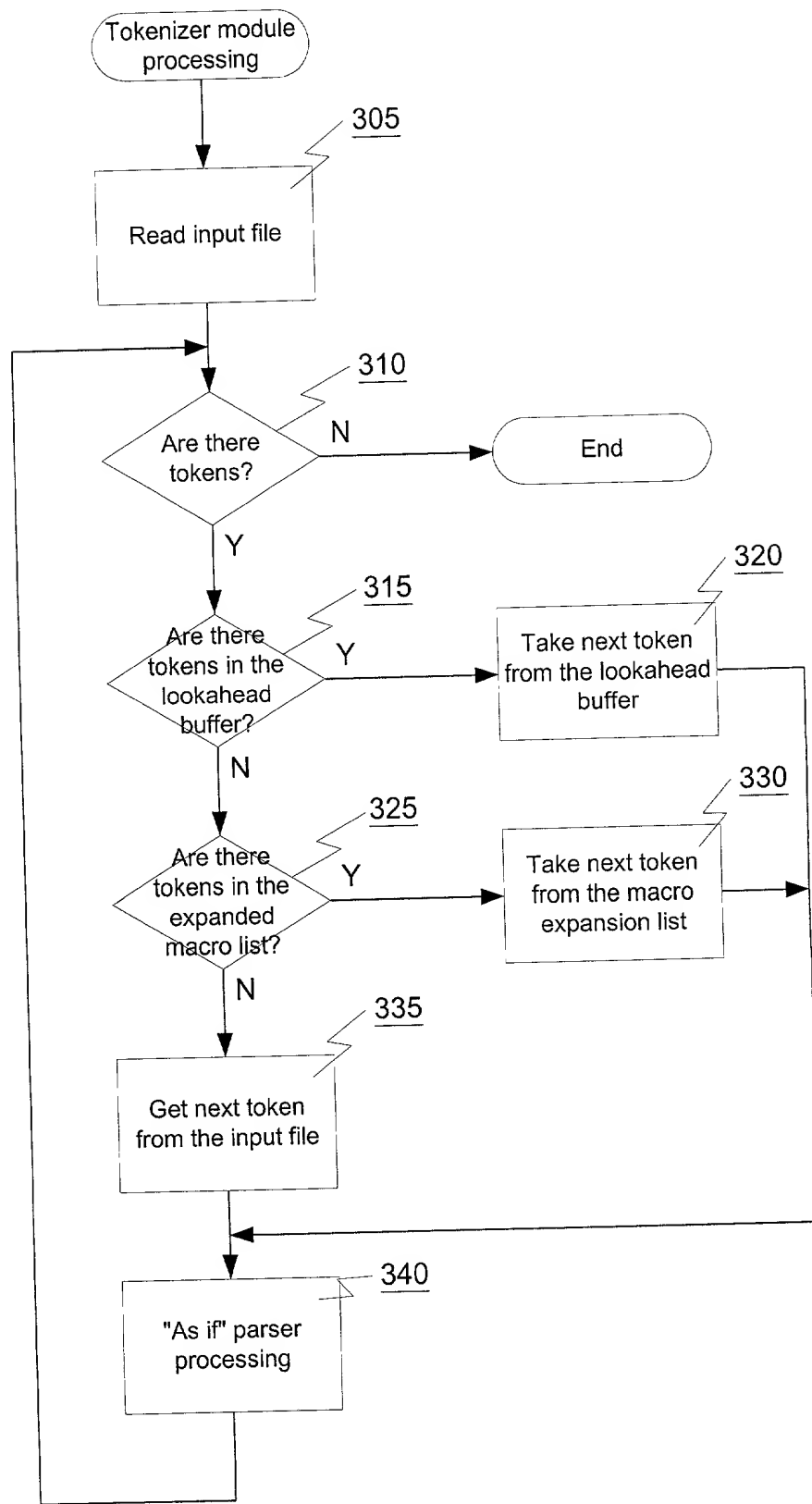


Figure 3

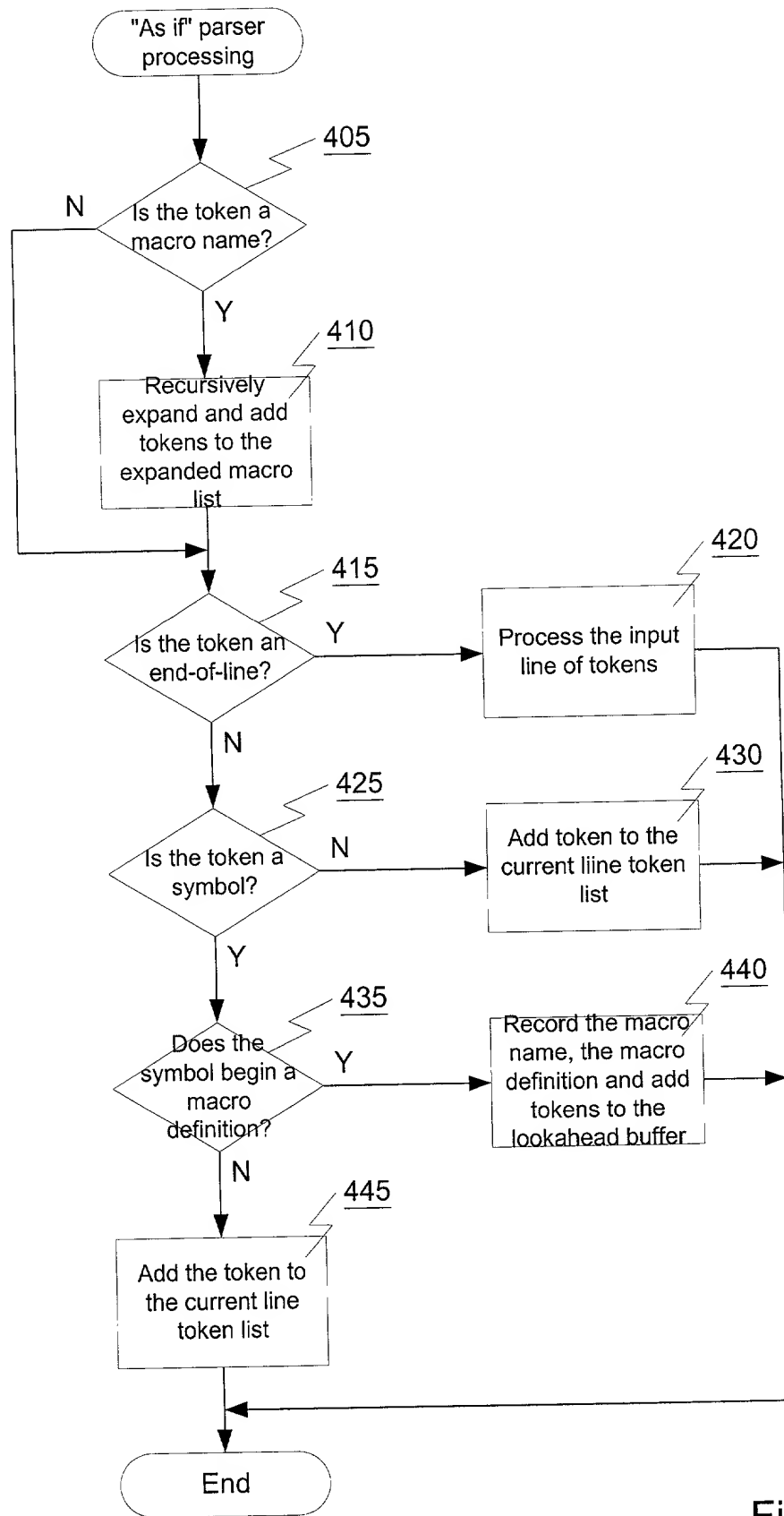


Figure 4

Token type	<u>510</u>
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Token string 515IsScan 520

Visibility	525
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Macro argument index	530
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Hidden token type	535
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Hidden token string	540
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Figure 5

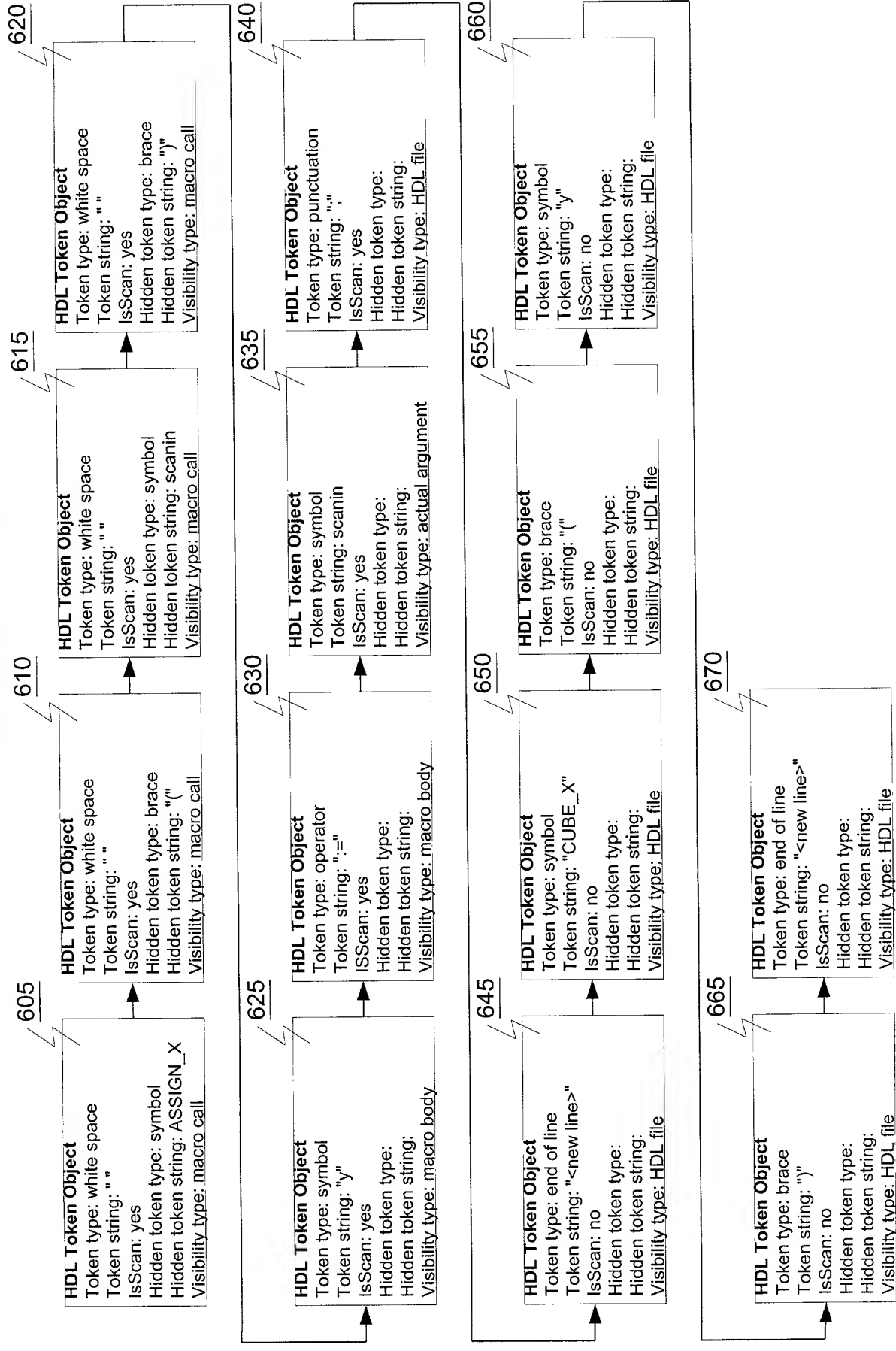


Figure 6

Input HDL File

```
...  
...  
...  
DEFINE ASSIGN_X(x) = [y:=x]  
DEFINE CUBE_X(x) = [x*x*x]  
...  
...  
...  
ASSIGN_X(SCANIN);  
ycubed := CUBE_X(y);  
...  
...
```

705

Token Stream Seen by
Parser

```
...  
"y"  
":="  
"SCANIN"  
...  
"ycubed"  
":="  
"CUBE_X"  
"("  
"y"  
")"  
";"
```

710

Token Stream Seen by
Output Module

```
...  
"ASSIGN_X"  
"("  
"SCANIN"  
")"  
";"  
...  
"ycubed"  
":="  
"CUBE_X"  
"("  
"y"  
")"  
";"
```

715

Figure 7

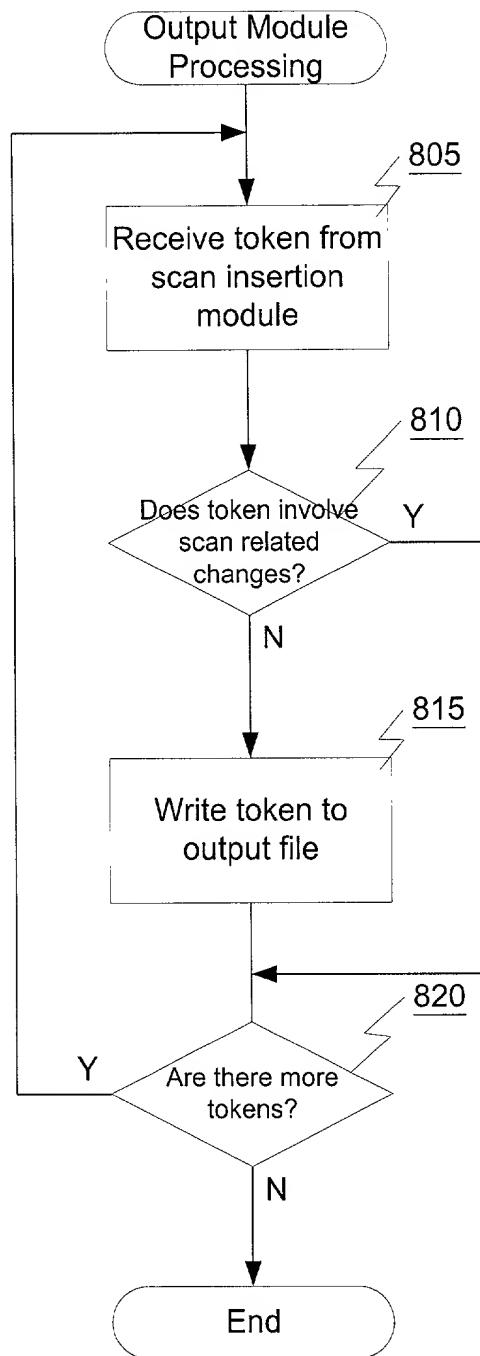


Figure 8